

REMARKS

Claims 2, 14, 15, 19, and 20 have been amended. Claims 3, 9, 10, and 18 have been canceled. Reexamination and reconsideration are respectfully requested.

Applicants gratefully acknowledge the allowance of Claims 1, 2, 4, 6-8, 11, 12, 17, 22-21, and 23. Further, Applicants note the allowability of Claims 14-16, 19, and 22. Accordingly, Applicants have rewritten allowable Claims 14, 15, and 19 into independent form so as to be allowable.

In view of the above, only Claims 5 and 13 remain rejected as obvious over Krause (U.S. 5,270,622) in view of Deller (U.S. 4,764,711). In view of the following remarks, Applicants respectfully traverse this rejection.

Applicants Independent Claim 5 recites a motor controller comprising a AC motor, power converter, and a controller for detecting a rotor position of the AC motor in controlling a voltage command value. The controller has a current detection unit for detecting a current of the AC motor at a point of time when the carrier reaches close to a center value. The controller also has a position detection unit for detecting the rotor position with the AC motor using the detected current.

Accordingly, Applicants claimed invention advantageously provides a motor controller to detect the current of each phase at a timing, for example t_a , t_b , t_c , and t_d , when the carrier takes intermediate value (mean value of the maximum value and the minimum value) as shown in the preferred embodiment of Figure 13, thereby a position may be detected by detecting the current differential value in section 1 and section 2.

By contrast, Krause merely describes that the current is detected when the carrier comes to be either the maximum value or the minimum value. However, Krause does not teach, suggest, or describe detecting a current of the AC motor at a point of time when the carrier reaches close to a center value, such that it accomplishes the timing discussed in the advantages above.

Moreover, Krause's deficiencies are not remedied by Deller. Deller fails to disclose any controller as claimed. Deller does not teach or suggest a controller having Applicants claimed current detection unit for detecting the current via AC motor at a point of time when the carrier reaches close to a center value, nor the claimed position detection unit for detecting the rotor position using the current detected by the above-described current detection unit.

In view of the foregoing, Applicants submit independent Claim 5 along with its dependent claims are patentable over Krause in view of Deller.

In view of the foregoing, Applicants submit that all remaining claims are now in condition for allowance. An early notice to that affect is solicited.


If there are any questions regarding this amendment or the application in general, a telephone call to the undersigned would be appreciated since this should expedite the prosecution of the application for all concerned.

If necessary to effect a timely response, this paper should be considered as a petition for an Extension of Time sufficient to effect a timely response, and

please charge any deficiency in fees or credit any overpayments to Deposit
Account No. 05-1323 (Docket #381NP/50925).

Respectfully submitted,

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